

REMARKS

Applicant has amended the Claims 1, 4, 5, 6, 7, and 10 and cancelled the Claims 2 and 3 without prejudice. Applicant respectfully submits that these amendments to the claims are supported by the application as originally filed and do not contain any new matter. In addition, Applicant respectfully submits that Claim 1 (currently amended) contains the limitations of not only the Claim 1 but also the original Claims 2 and 3. Claim 2 was dependent upon Claim 1 and Claim 3 was dependent upon Claim 2. Therefore, Applicant respectfully submits that by combining the limitations of Claims 2 and 3 into Claim 1, the Claim 1 (currently amended) has the scope of the Claim 3 and does not raise any new issues which would require any further consideration and/or search. Also, Applicant respectfully submits that since Applicant has previously made arguments concerning the preamble of the claim, the minor amendments to the preamble do not raise any new issues which would require any further consideration and/or search. Therefore, and in view of the above, Applicant will discuss the Final Office Action in terms of the claims as amended.

The Examiner has rejected the Claims 1-10 under 35 U.S.C. 103 as being obvious over Nakayama in view of Kinnaird, stating that Nakayama discloses a graphical transforming apparatus and method for its use which essentially teaches all of the claimed limitations except for the environment of the instant invention which is a wire bonding data device; Kinnaird discloses the use of an automated system and method for bonding and testing wire connections in an integrated circuit chip which is computer controlled; and it would have been obvious to one of ordinary skill in the art to combine the graphical transforming apparatus and method of Nakayama with the automated wire bonding means of Kinnaird. In addition, it is Examiner's opinion that the preamble is not accorded any patentable weight since it merely recites the purpose of a process or the intended use of the structure.

In reply thereto, Applicant would like to first point out that the preamble of Applicant's Claim 1 does not merely recite the purpose of the process or intended use of the structure. Applicant respectfully submits that the preamble sets the environment and is tied into the elements of the claims. In particular, at least at lines 4, 8, and 11 of the Claim 1, the preamble is tied into the "wire loop shape" which appears in the Claim 1 at lines 4, 8, and 11 and other places in the Claim 1 (currently amended). Accordingly, Applicant respectfully submits that the

preamble does not merely recite a purpose of the process or intended use of the structure and is a limitation of the claims.

With the above in mind, Applicant has carefully reviewed the arts cited by the Examiner and respectfully submits that a review of Kinnaird indicates that it is an apparatus for checking the peeling strength of the wire loop and examining the bonding conditions after the wire loop has been formed. In particular, the device of Kinnaird tests the wire connection automatically and automatically adjusts the bonding parameters of subsequent wire connections in response to the test data (see abstract) and does so without any operator input and without any consideration for the loop shape. In contrast thereto, in Applicant's invention, the editing handle on the monitor screen of the wire bonding device can be moved so as to decide on the required loop shapes and then the selected loop shape is formed on the chip. To form the selected shape of the wire loop, as shown in figure 8, the amount of wire fed out, the angle, the reverse angle, etc. and the amount the capillary that feeds out the wire is moved up and down is determined to thus form a loop. With such a device and method of Applicant's invention, a wire loop in many shapes can be provided in particularly complicated shapes, including kinks in the wire can be made. In addition, in Applicant's invention, the wire loop shape shown on the screen and selected using the editing handle is not necessarily the shape which is made on a chip during the actual bonding process. In particular, with Applicant's invention, a judgment is made to determine if the particular wire loop shape selected on the monitor screen can actually be made on the chip during the actual bonding process before an actual wire loop is formed on the chip. Such a particular construction is not shown or suggested by Kinnaird.

In addition, as to Nakayama, Applicant respectfully submits that Nakayama is merely a graphical transforming apparatus and merely draws curves and polygonal lines and transforms them into graphics which are displayed as patterns on a screen. Applicant respectfully submits that there is no suggestion in Nakayama that any particular pattern or shape drawn on the screen or display would be utilized for any other purpose than for just the display or perhaps drawing the pattern or image on the screen on a piece of paper. Accordingly, Applicant respectfully submits that there is no suggestion in Nakayama that one would use such an apparatus for transforming graphics to control a wire bonding machine so as to be able to adjust or set the shape of the wire loop. In addition, Applicant respectfully submits that there is no suggestion in Kinnaird of such a matter either.

In view of the above, therefore, Applicant respectfully submits that not only is the combination suggested by the Examiner not Applicant's invention, but also the combination suggested by the Examiner is not suggested to one of ordinary skill in the art.

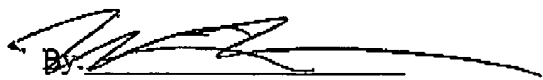
Accordingly, Applicant respectfully submits that the Claims 1 and 4-10 are not obvious over Nakayama in view of Kinnaird.

In view of the above, therefore, it is respectfully requested that this Rule 116 Amendment be entered, favorably considered, and the case passed to issue.

Please charge any additional costs incurred by or in order to implement this Amendment or required by any requests for extensions of time to KODA & ANDROLIA DEPOSIT ACCOUNT NO. 11-1445.

Respectfully submitted,

KODA & ANDROLIA

By:   
William L. Androlia  
Reg. No. 27,177

2029 Century Park East  
Suite 1430  
Los Angeles, CA 90067  
Tel: (310) 277-1391  
Fax: (310) 277-4118

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